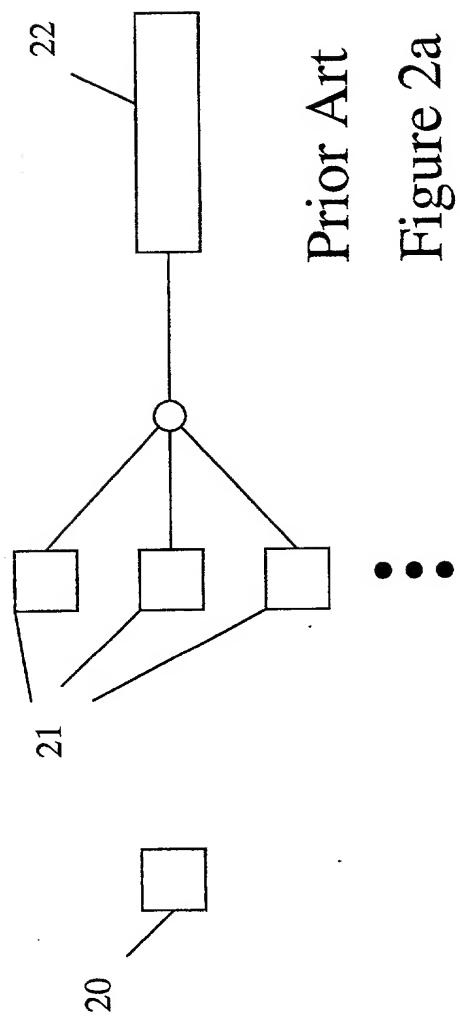


FIGURE 1

PRIOR ART

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Prior Art  
Figure 2a

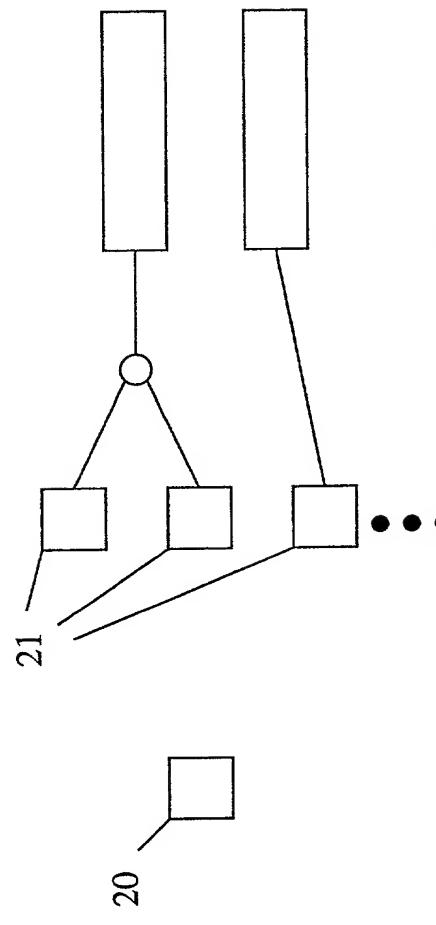
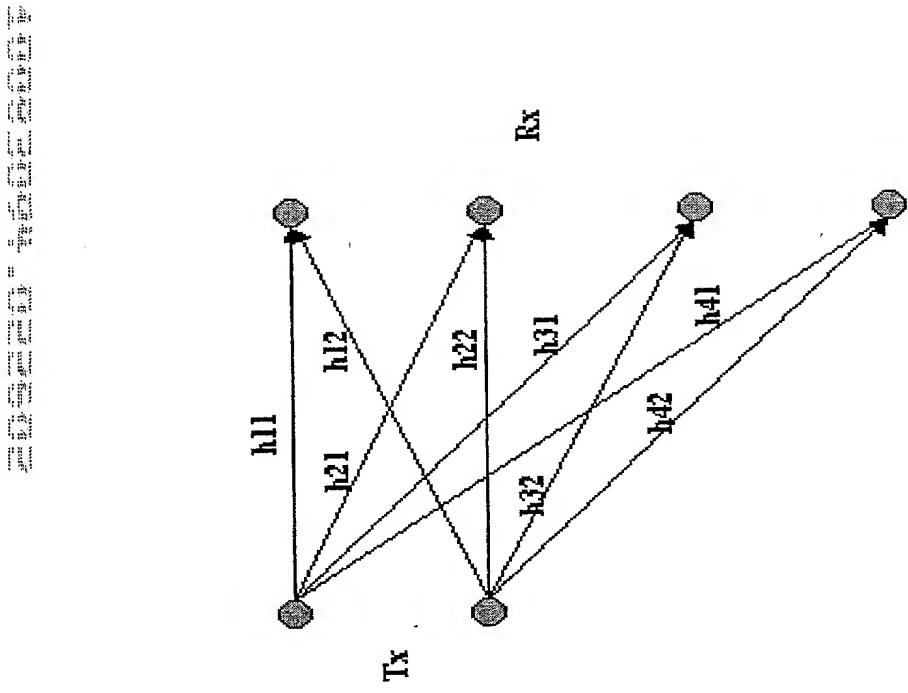
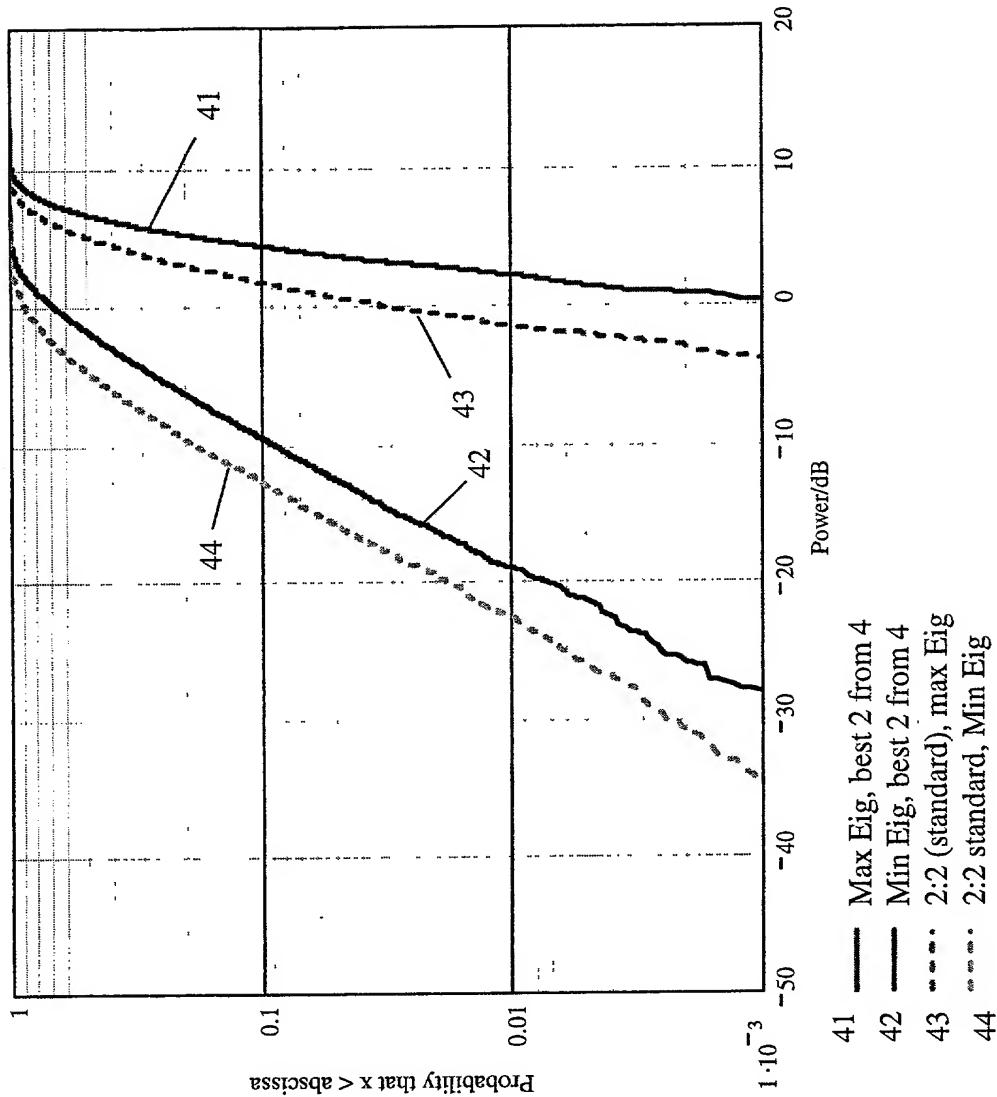


Figure 2b



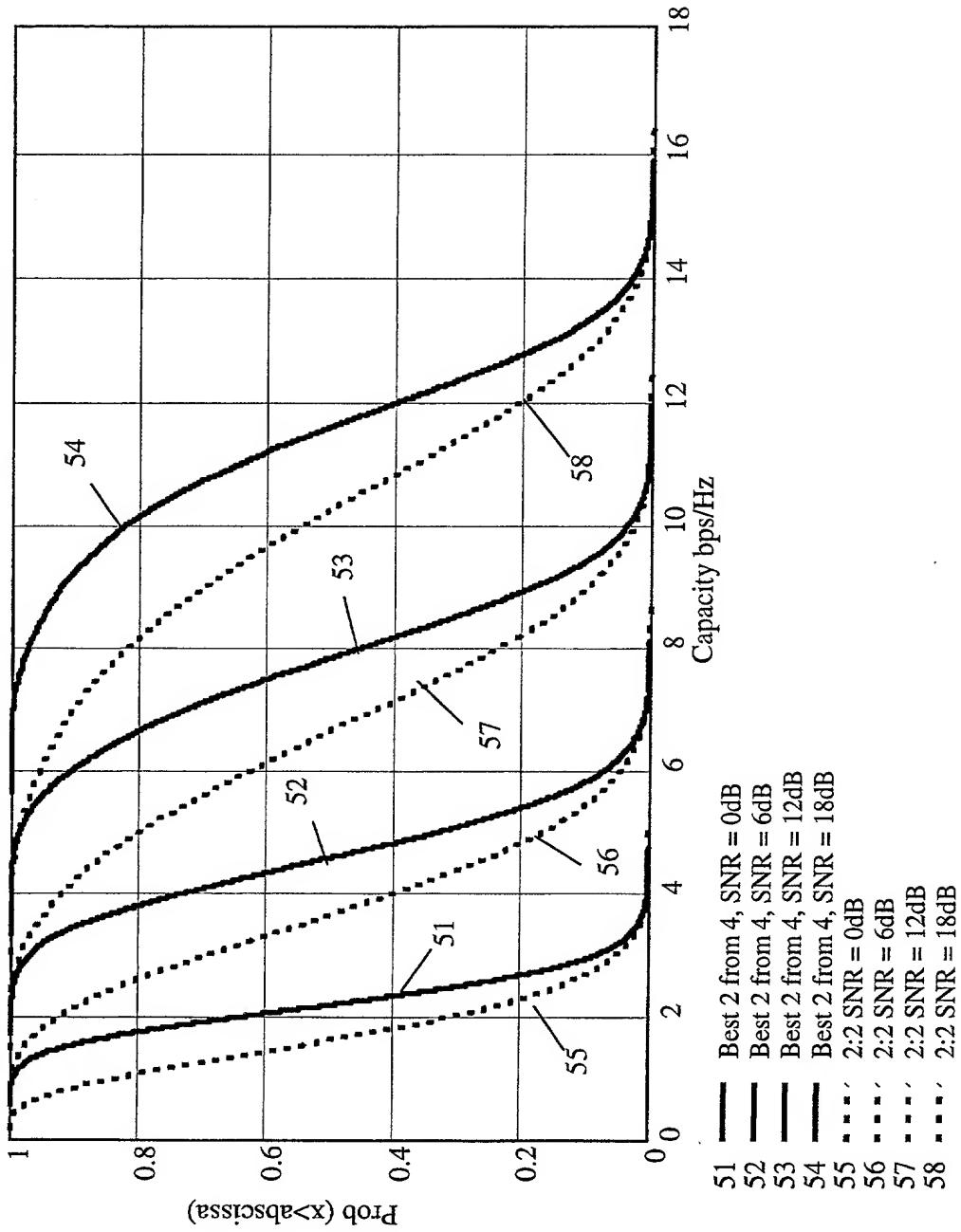
MIMO configuration with 2 Node B antennas and 4 UE antennas

Figure 3



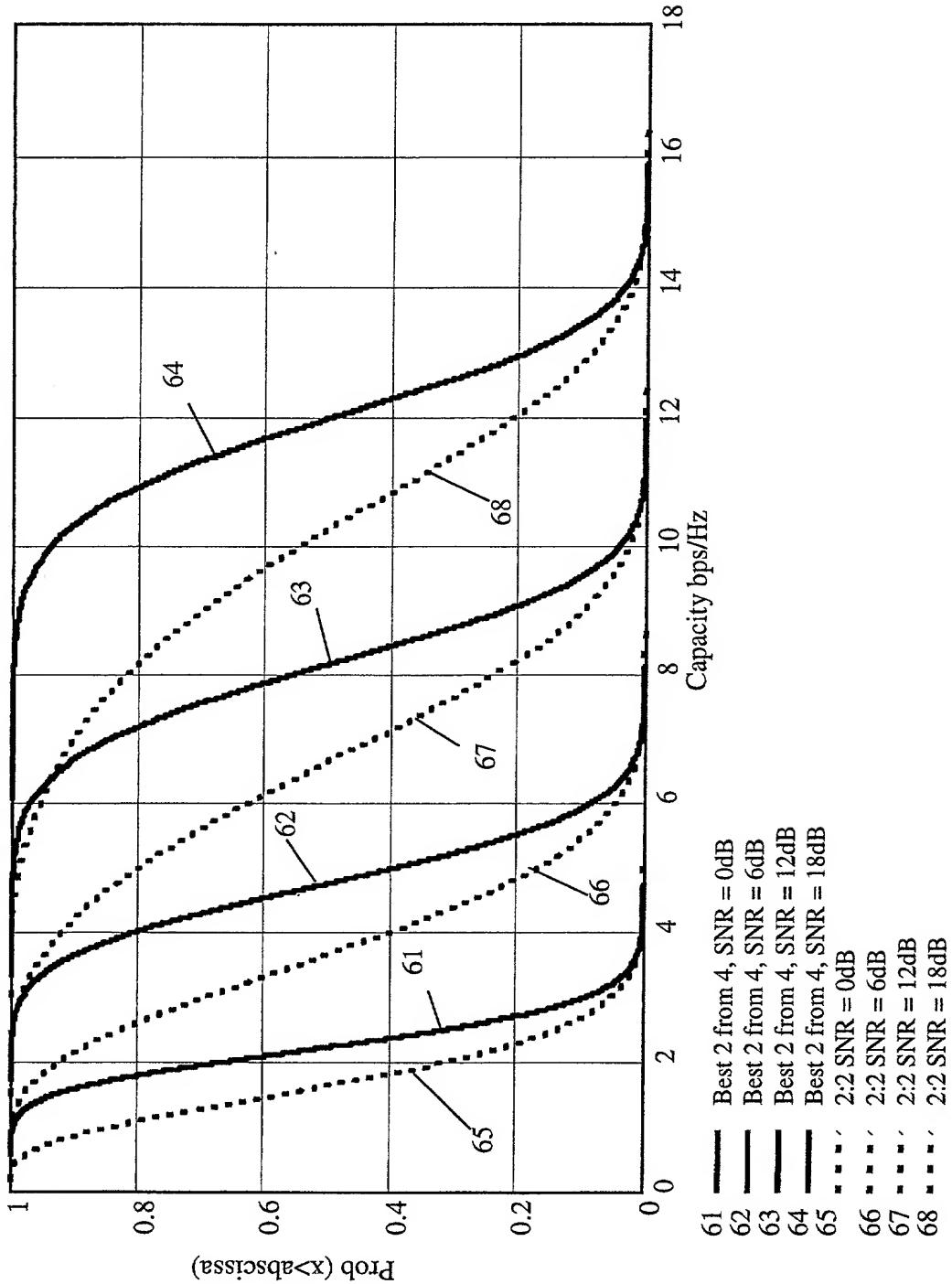
Comparison of eigenvalues for standard 2:2 MIMO and eigenvalue selection diversity (best 2 from 4) using the maximum sum of eigenvalues as the selection metric.

**Figure 4**



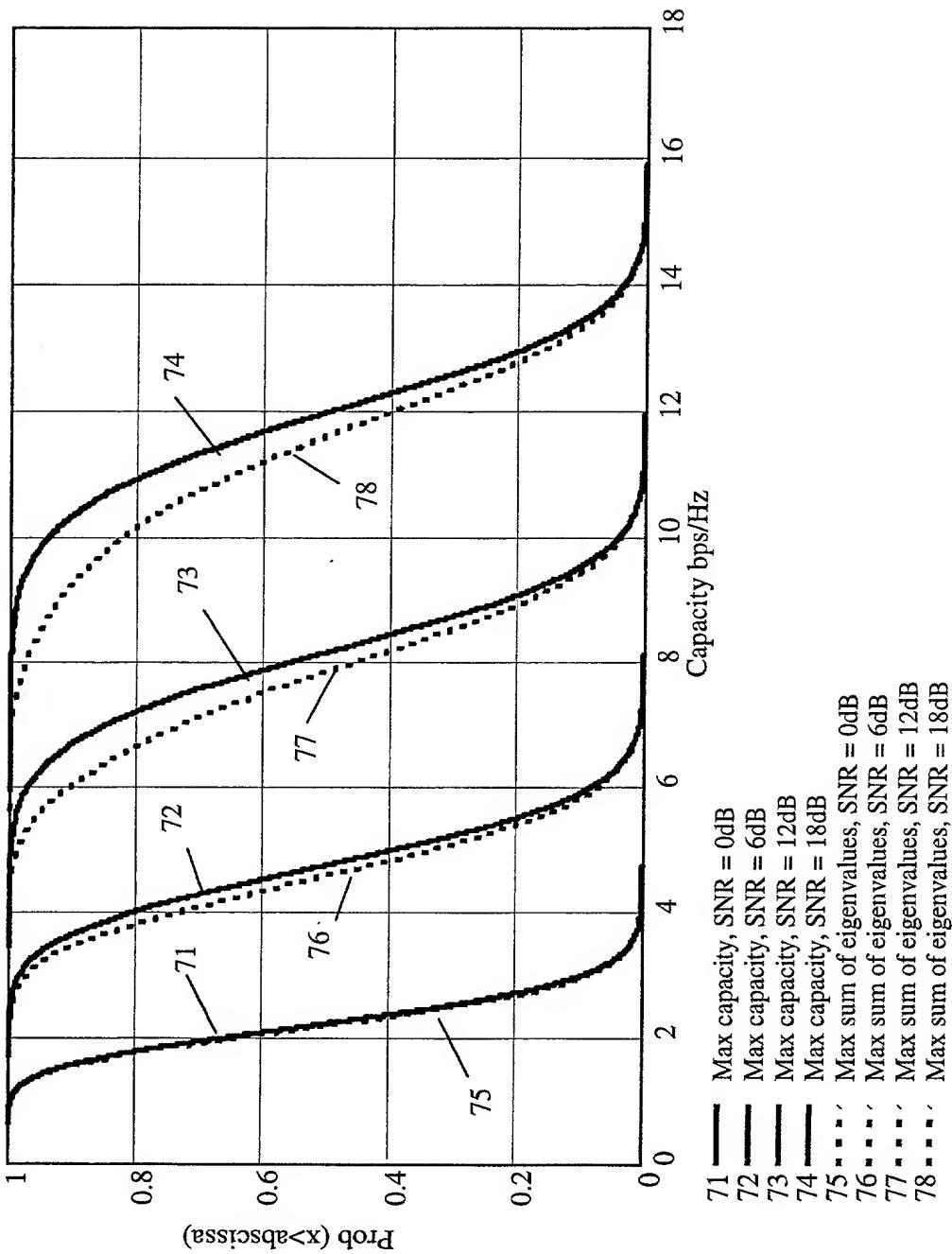
Comparison of capacity distributions for standard 2:2 MIMO and eigenvalue selection diversity (best 2 from 4) using the maximum sum of eigenvalues as the selection metric.

**Figure 5**



Comparison of capacity distributions for standard 2:2 MIMO and eigenvalue selection diversity (best 2 from 4) using the maximum instantaneous link capacity as the selection metric.

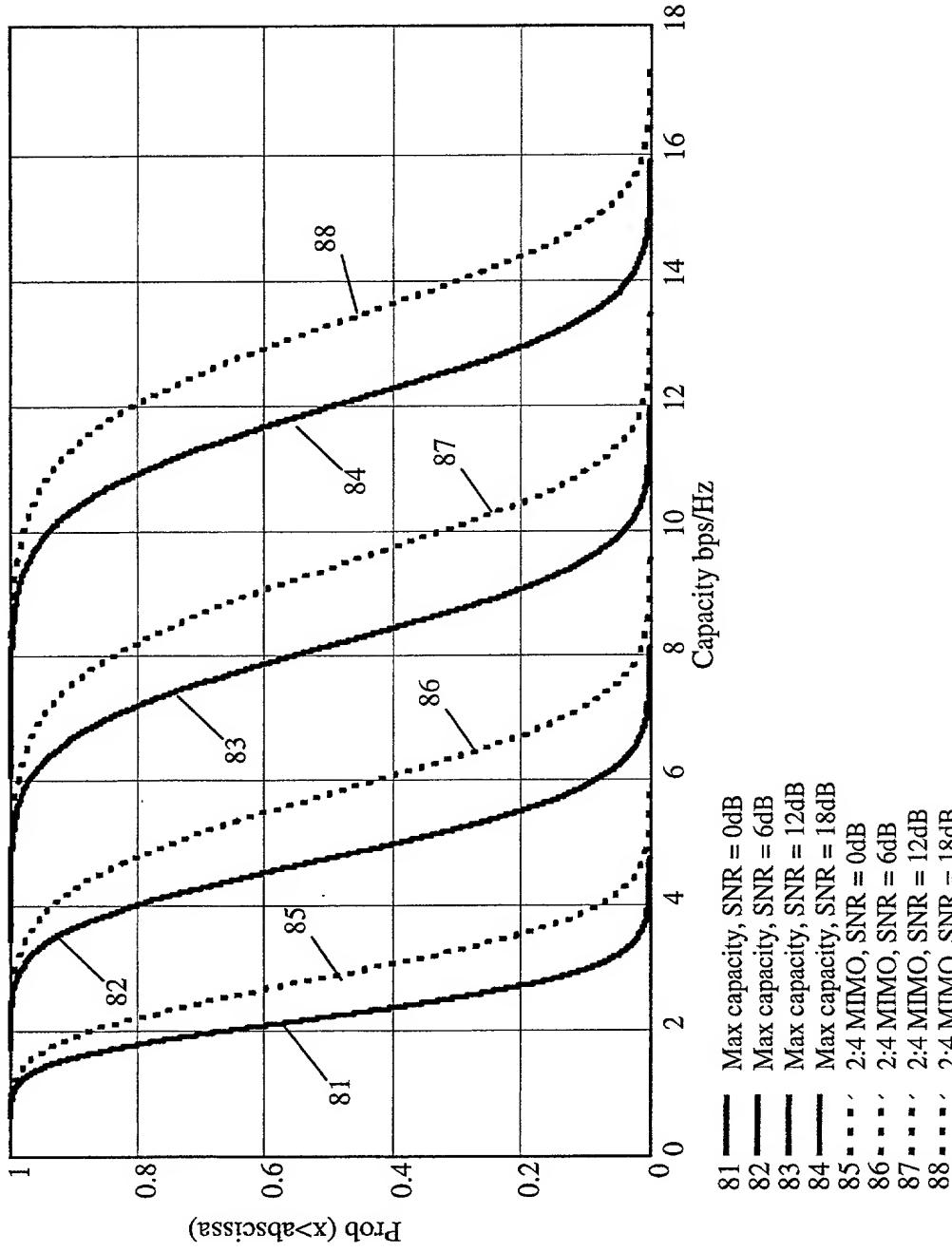
**Figure 6**



Comparison of capacity distributions for the two eigenvalue selection diversity schemes

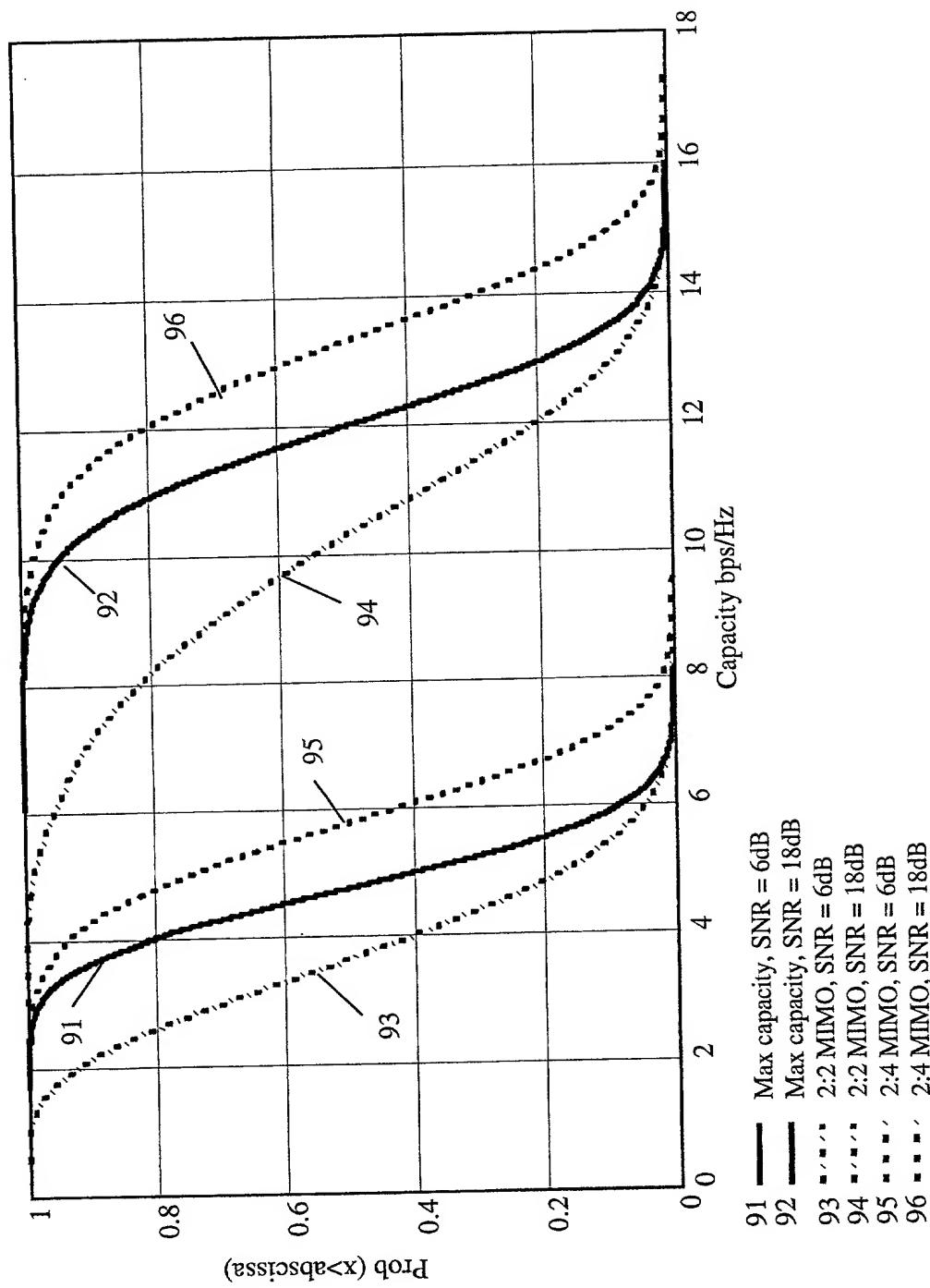
Figure 7

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Comparison of 'maximum capacity' eigenvalue selection diversity and standard 2:4 MIMO capacity distributions.

Figure 8



Comparison of maximum capacity eigenvalue selection diversity with 2:2 and 2:4 MIMO capacity curves

Figure 9

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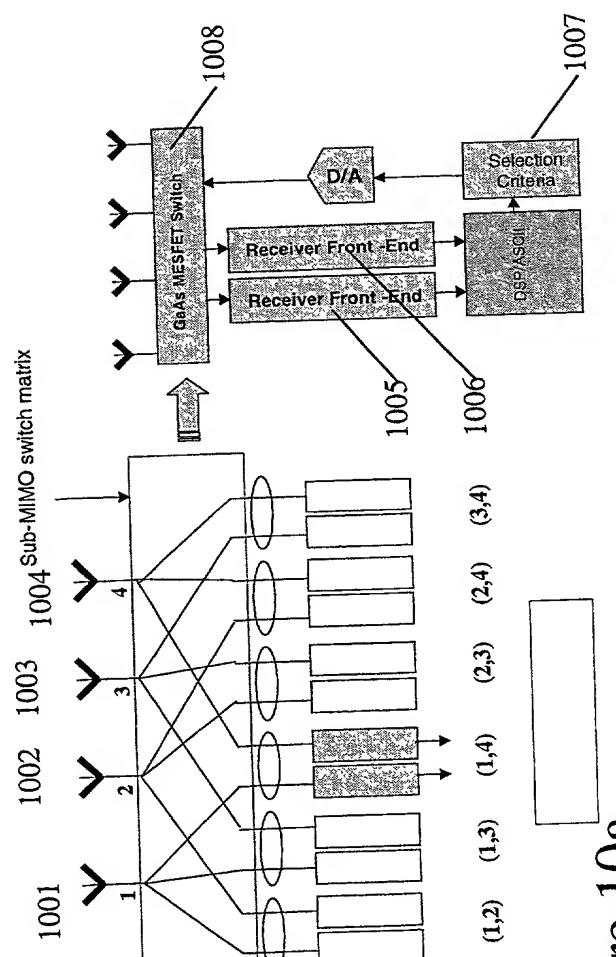
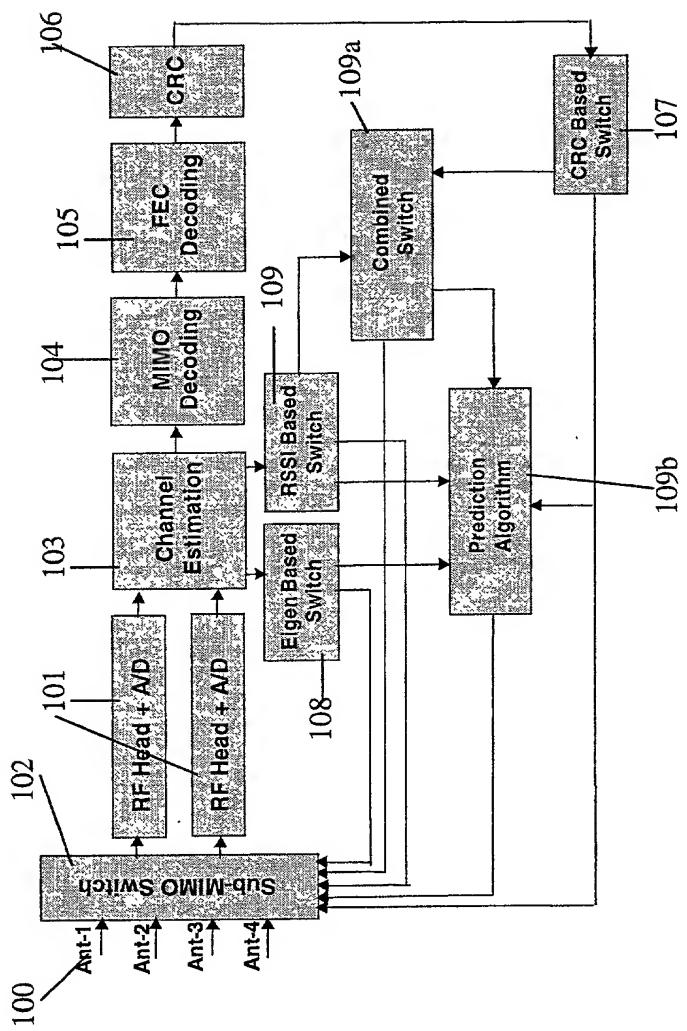


Figure 10a

	<p><b>4-antenna</b></p> <p>(1,2) (1,3) (1,4) (2,3) (2,4) (3,4)</p> <p><b>disjoint switch</b></p> <p><b>example of overlap switch (keep Ant #1)</b></p>
	<p><b>6-antenna</b></p> <p>(1,2) (1,3) (1,4) (1,5) (1,6) (2,3) (2,4) (2,5)  (2,6) (3,4) (3,5) (3,6) (4,5) (4,6) (5,6)</p> <p><b>disjoint switch</b></p> <p><b>example of overlap switch (keep Ant #1)</b></p>

Figure 10b

Figure 10c



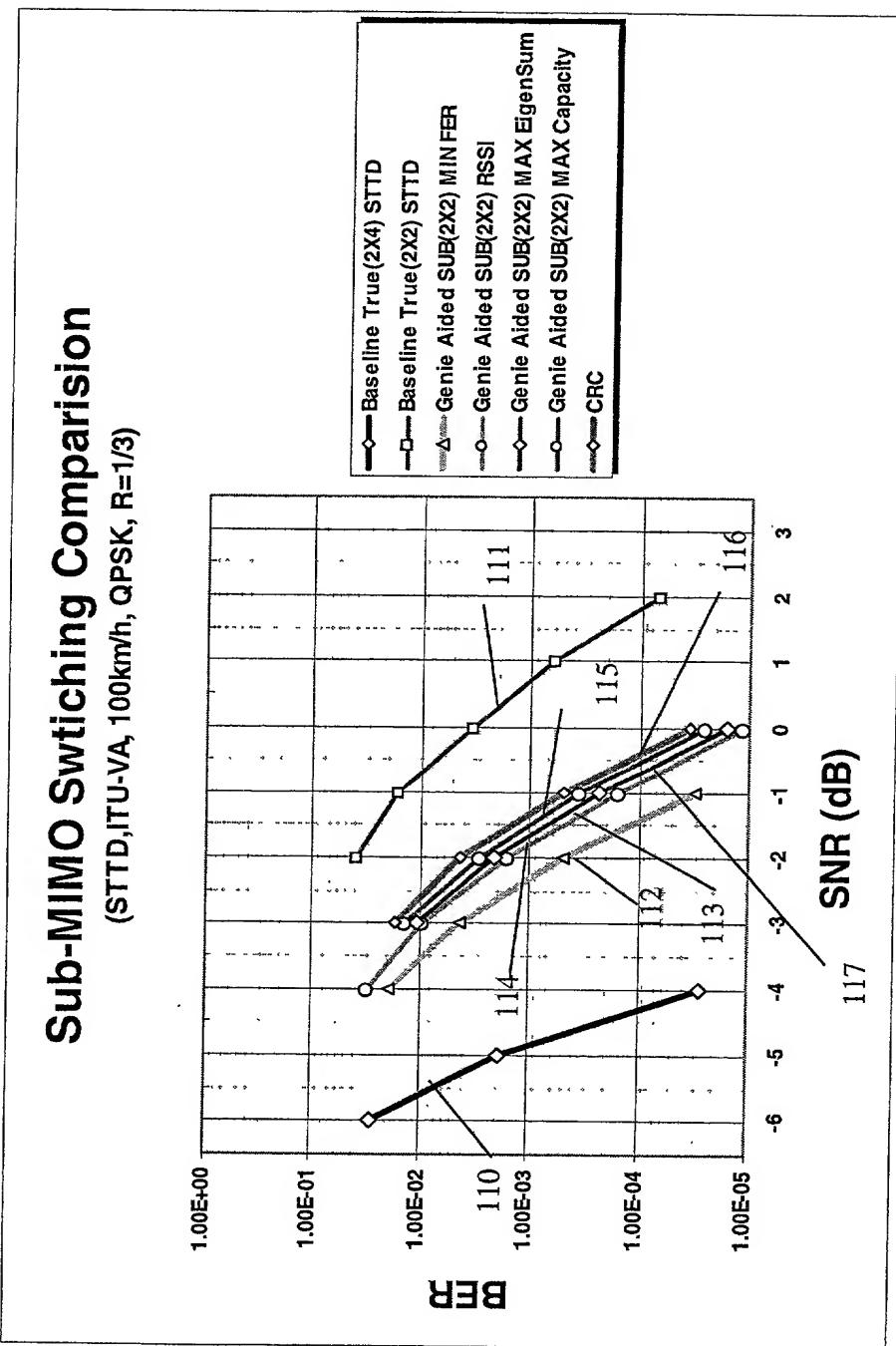


Figure 11

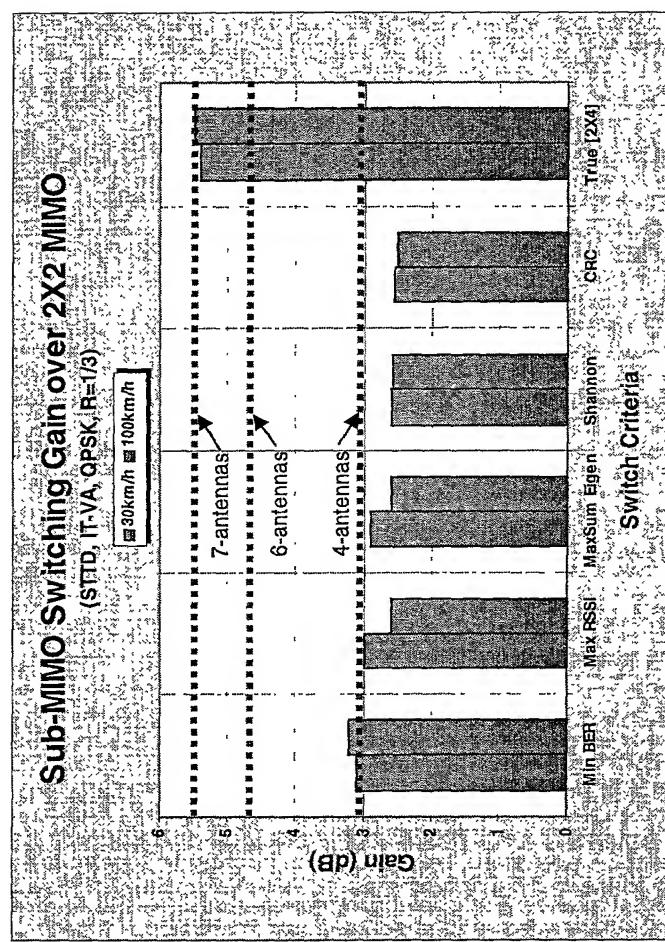


Figure 12

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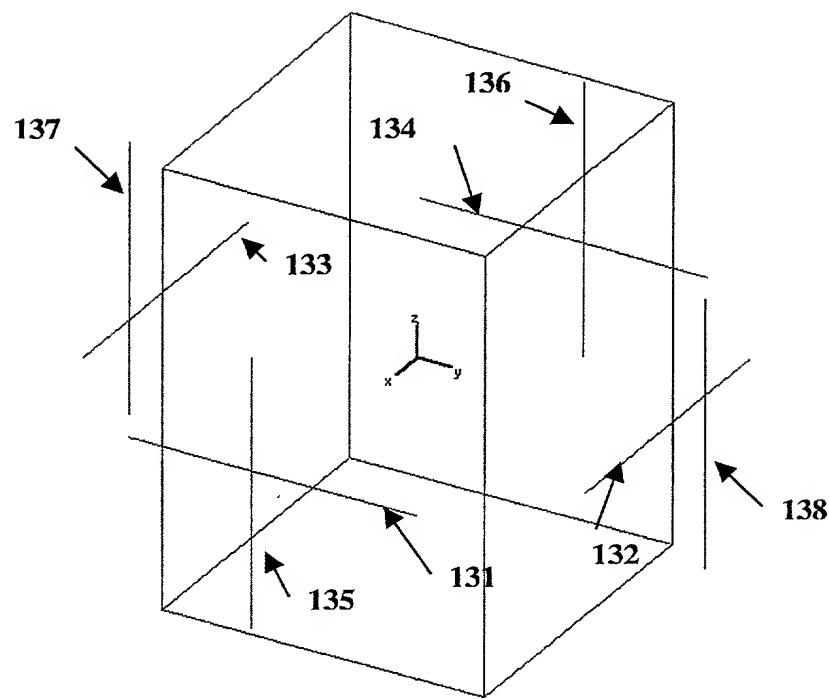


Figure 13

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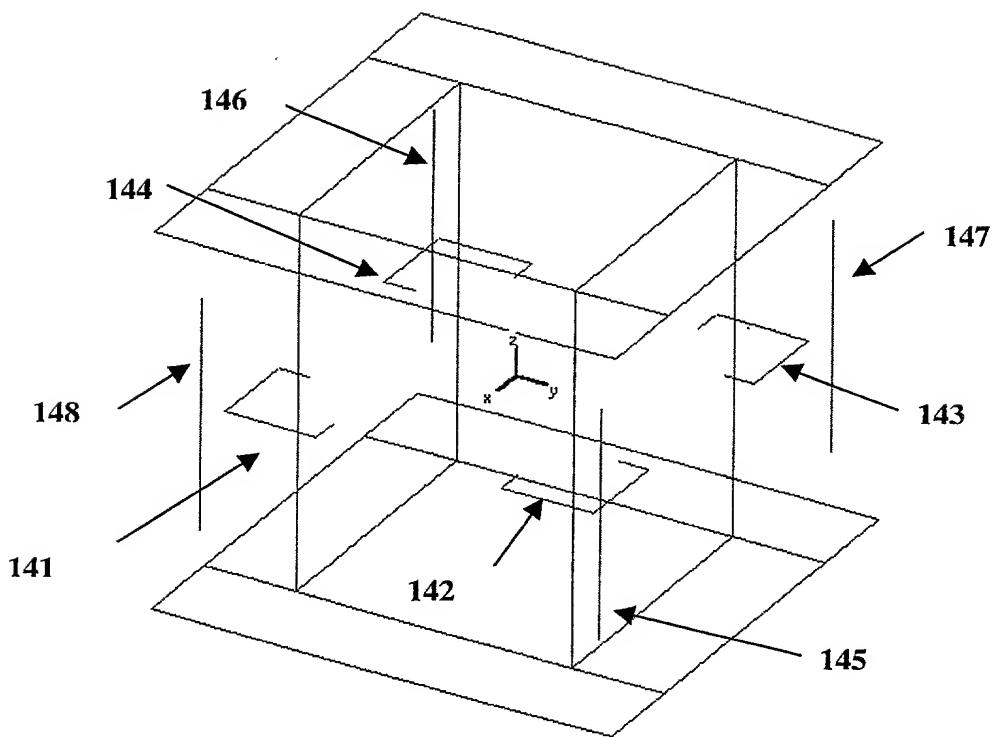


Figure 14

	Configuration 1		Configuration 2	
Average signal level (dB)	180°	4.6	180°	3.9
	90°	6.7	90°	4.8
Signal level spread (dB)	180°	1.4	180°	1.5
	90°	0.5	90°	0.3
Average standard deviation (dB)	180°	4.1	180°	1.7
	90°	1.4	90°	0.4
Lowest maximum achievable diversity gain (dB) (unit 0° orientation)	11.5	15		
Lowest maximum achievable diversity gain (dB) (unit 45° orientation)	14.5	14		

Figure 15

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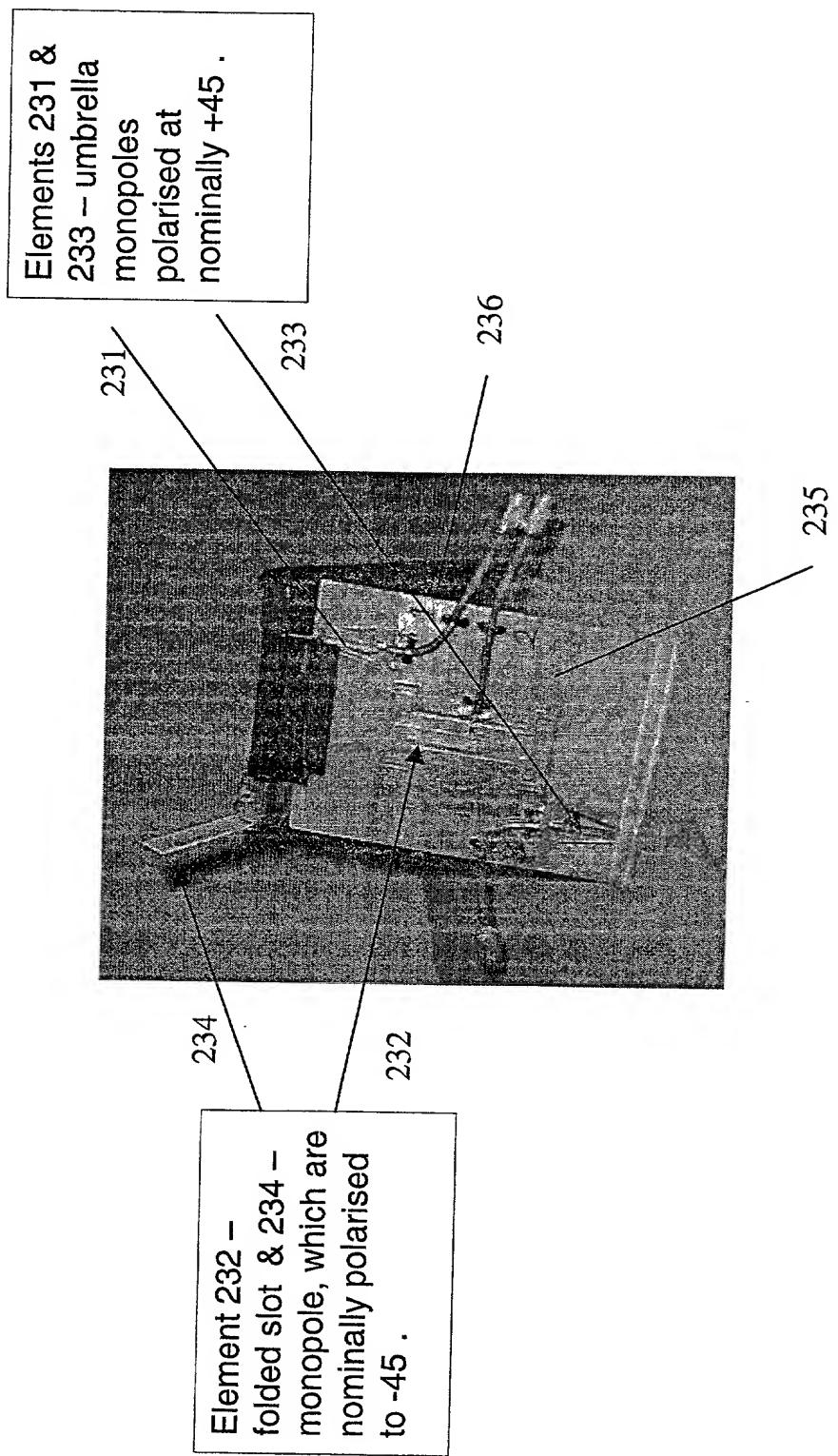


FIGURE 16

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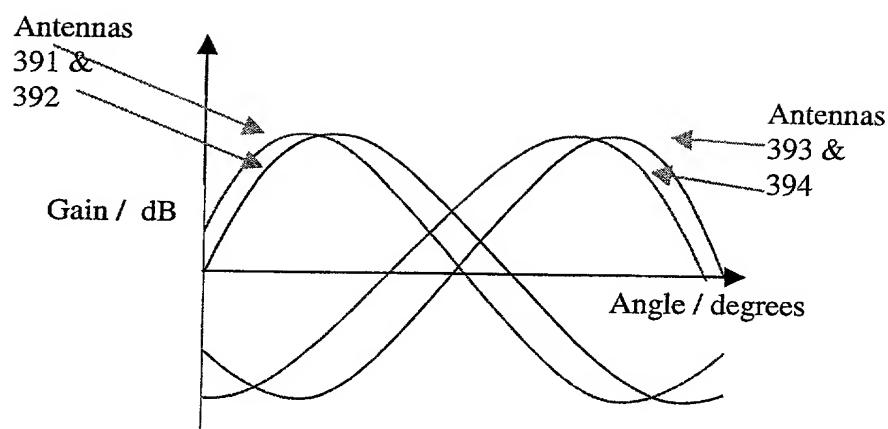


Figure 17

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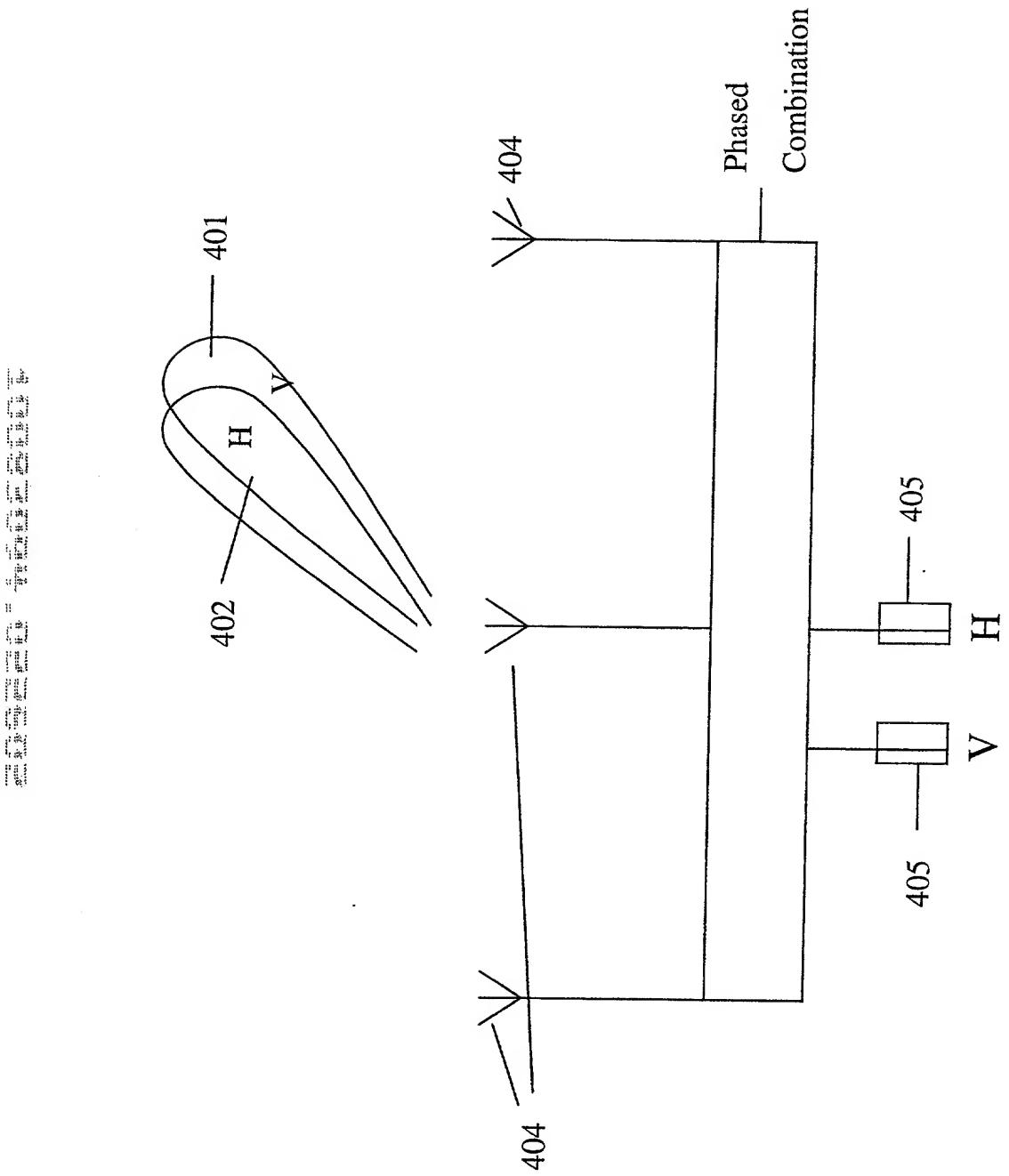


FIGURE 18